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# **NAVAL POSTGRADUATE SCHOOL**

## **Monterey , California**



## **THESIS**

R2475

**COMPETITIVE PROCUREMENT  
OF ELECTRICAL POWER**

by

James L. Ray

December 1987

Thesis Co-Advisors:

Raymond W. Smith  
Joseph G. San Miguel

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This thesis set out to determine if it was possible or required for the Department of Defense to competitively procure electrical utility services (power). The research was conducted by archival research of legal rulings, industry and governmental publications, federal regulations, federal statutes, and federal policies. This was followed with field research and interviews with key individuals involved in utility management and utility procurement. It was determined that competitive procurement of electrical utility services is not only possible, it is required. The thesis presents an overview of the electric utility industry, a review of competitive procurement guidance and policies, and an analysis of several considerations and strategies for competitive procurement, and it provides conclusions and recommendations for actions and further study.

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**Competitive Procurement of Electric Power**

by

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Lieutenant Commander, United States Navy  
B.S., New Mexico State University, 1980

Submitted in partial fulfillment of the  
requirements for the degree of

MASTER OF SCIENCE IN MANAGEMENT

from the

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## **ABSTRACT**

This thesis set out to determine if it was possible or required for the Department of Defense to competitively procure electrical utility services (power). The research was conducted by archival research of legal rulings, industry and governmental publications, federal regulations, federal statutes, and federal policies. This was followed with field research and interviews with key individuals involved in utility management and utility procurement. It was determined that competitive procurement of electrical utility services is not only possible, it is required. The thesis presents an overview of the electric utility industry, a review of competitive procurement guidance and policies, and an analysis of several considerations and strategies for competitive procurement, and it provides conclusions and recommendations for actions and further study.

## TABLE OF CONTENTS

<b>I. INTRODUCTION .....</b>	<b>8</b>
A. GENERAL .....	8
B. OBJECTIVES .....	9
C. RESEARCH QUESTIONS .....	9
D. RESEARCH METHODOLOGY .....	10
E. ORGANIZATION OF RESEARCH .....	10
<b>II. OVERVIEW OF THE ELECTRICAL UTILITY INDUSTRY .....</b>	<b>12</b>
A. ELECTRICAL UTILITY INDUSTRY ORGANIZATION .....	12
B. RECENT ELECTRICAL MARKET HISTORY .....	15
C. ELECTRICAL UTILITY INDUSTRY INFRASTRUCTURE .....	18
D. CROSS-CLASS SUBSIDIZATION .....	19
E. ELECTRICAL POWER WHEELING .....	21
<b>III. COMPETITIVE PROCUREMENT GUIDANCE AND POLICIES</b>	<b>27</b>
A. CONGRESSIONAL GUIDANCE .....	27
B. FEDERAL LAWS AND REGULATIONS .....	28
C. COURT DECISIONS .....	35
D. DEPARTMENT OF DEFENSE PROCUREMENT POLICY .....	45
E. PROPOSED CONGRESSIONAL DIRECTION FY 1988 .....	49

<b>IV. ANALYSIS OF COMPETITIVE PROCUREMENT OF ELECTRICAL POWER .....</b>	<b>54</b>
A. COMPETITIVE ENVIRONMENTAL CONCERNS .....	54
B. COMPETITIVE ENVIRONMENTAL CONSIDERATIONS .....	59
C. PROCUREMENT STRATEGIES .....	63
D. ELECTRICAL UTILITY INDUSTRY OBJECTIONS .....	68
<b>V. CONCLUSIONS AND RECOMMENDATIONS .....</b>	<b>74</b>
A. OVERVIEW .....	74
B. CONCLUSIONS .....	74
C. RECOMMENDATIONS .....	77
D. ANSWERS TO RESEARCH QUESTIONS .....	79
E. AREAS OF FUTURE RESEARCH .....	80
INITIAL DISTRIBUTION LIST .....	82

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## I. INTRODUCTION

### A. GENERAL

The regulatory environment of the electric utility industry has changed considerably in the past twenty years. The environment is no longer fully protected, regulated, and monopolistic. Deregulation initiatives, national energy policies, and U.S. Supreme Court rulings have completely changed regulatory conditions. The existing electric utility industry is less regulated and more competitive than at any time since the implementation of the Federal Power Act of 1935.

Concurrent with recent changes in the electric utility industry were changes in Department of Defense procurement methods and policies. Congress has directed numerous changes in procurement policies and methods. The general direction of these changes has been to streamline, standardize, and promote competition in all procurement activities. Public Law 80-413, the Armed Services Procurement Act of 1947 (ASPA), established congressional policies for the Department of Defense (DoD) and National Aeronautics and Space Administration (NASA). The Office of Federal Procurement Policies Act of 1974 (OFPPA) directed all Executive agencies to standardize procurement methods and regulations. As a result of OFPPA, the System of Federal Acquisition Regulations (FAR) was established. Three agencies coordinate FAR actions: the Department of Defense, the General Services Administration, and the National Aeronautics and

Space Administration. The methods and practices originally issued as the FAR were substantially the same as those contained in the regulations they replaced for DoD and NASA—the Defense Acquisition Regulations (DAR). The Competition in Contracting Act (CICA) is the first major procurement act since the ASPA. As such, it has had a substantial effect on all federal government procurement.

## **B. OBJECTIVES**

This study was undertaken to review how the Department of Defense is applying current statutes and regulations dealing with competitive procurement of electric power. The impetus behind this research is to gain an understanding of the impact the new federal procurement policies and procedures have had in electrical power procurement. Have the new procurement policies overlooked societal concerns? Is the Department of Defense taking full advantage of recent laws and court rulings which modify the electric utility industry's regulatory environment? This paper will not provide a fully detailed analysis of any one public law or procurement regulation. Rather, it is intended to provide a conceptual base for discussion, and possible competitive strategies for use within the Department of Defense.

## **C. RESEARCH QUESTIONS**

There are two questions this study will attempt to answer. The primary one is: What do current federal statutes, regulations, and policies mandate for competitive procurement of electric power? The

secondary question is: What are the conditions necessary for the Department of Defense to competitively procure electric power in the most timely, economic, and efficient manner?

#### **D. RESEARCH METHODOLOGY**

Initial analysis of the primary and secondary research questions began with archival research. Federal statutes, regulations, studies, and publications were the basic starting points. Federal court cases and electric utility industry publications were also identified and reviewed during this phase. From the initial review, a list of questions was developed and used in the second phase of this study—personal and telephone interviews. These interviews of knowledgeable individuals in the electric utility industry, Department of Defense, Department of Energy, state regulatory agencies, and consumer/industry interest groups amplified the basic archival research and suggested areas of further research. As ideas and questions developed, key individuals were contacted, as necessary, for clarification. This approach was considered necessary to keep abreast of the most recent events and insure accuracy of concepts and ideas based on current and past events.

#### **E. ORGANIZATION OF RESEARCH**

The research is divided into five chapters. In this chapter, the identification of the research questions, methodologies, objectives, and direction of effort have been presented.

Chapter II presents an overview of the electric utility industry: organization, market history, infrastructure, rate subsidization, and power wheeling. This chapter is intended to provide some understanding of the electrical utility industry. It is not intended to be a technical discussion. Details are presented as necessary to develop concepts. The areas presented are not inclusive but they are important.

Chapter III is a review of specific policies (congressional and Department of Defense), statutes, regulations, and pertinent court cases. This chapter does not present all policies, etc., but only those that are the most pertinent to competitive procurement within the Department of Defense.

Chapter IV is an analysis of required conditions and possible strategies procurement officers might use in competitive procurement of electrical power. The analysis is based on the premise that competitive procurement of electricity is desirable. The analysis is not presented as inclusive. It is intended to show that there are strategies, methods, and reasons that will allow judicious competitive procurement when circumstances require or warrant it.

Chapter V presents conclusions and recommendations developed as a result of this research study. This chapter also provides a short list of areas for further study.

## **II. OVERVIEW OF THE ELECTRICAL UTILITY INDUSTRY**

### **A. ELECTRICAL UTILITY INDUSTRY ORGANIZATION**

Electricity is a unique commodity; it cannot be manufactured or processed prior to use. Electricity is consumed as it is generated. Electrical supply is usually viewed as a monopolistic industry: The lowest average cost (of producing electricity) can be reached only when there is a single producer. If there are multiple producers, monopoly theory holds, there will be needless duplication of facilities. This facility duplication will increase the average cost of service above the theoretical (monopoly) minimum average cost. Allowed unfettered competition, the lowest-cost producer is able to drive competitors out of the market by increasing output and decreasing price. This case of a single surviving supplier (the monopolist), in a market-controlled competition, occurs only in natural monopolies.<sup>1</sup>

This market trend was essentially what happened in the early 1900s. Customers were soon unable to go to anyone else for service. This prompted the Federal Power Act of 1935, which established regulatory powers and responsibilities at the federal and state level. This regulation of electric utilities established certain policies:

1. Cross-class subsidies such that certain customer classes do not carry their true cost-of-service;
2. Capitalization of costs, on the theory that cost recovery is assured by regulation;

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<sup>1</sup>Mansfield, Edwin, *Microeconomics: Theory and Applications*, 5th ed., p. 277, W. W. Norton and Company, Inc., New York, NY, 1985.

3. Low depreciation rates;
4. Risk underestimation, on the theory that regulators would provide relief if required;
5. Federal regulation of interstate bulk power transactions;
6. State regulation of intrastate and retail power sales;
7. Vertical integration by utilities to achieve economies of scale and quality service.<sup>2</sup>

In order to reap the benefits of a monopoly, while simultaneously protecting its citizens from monopoly dangers, state governments grant utility companies sole service rights to areas. Within the service areas, counties and cities grant utilities exclusive operating franchises. In order to protect the monopolist and its customers, state governments typically establish a public utility commission (or similar body) to review utility operations and set rates and tariffs for services provided by the monopolist.

Responding to the regulatory and commercial environment, electric utilities developed three distinct phases of operations: (1) Generation—the transformation of one form of energy (coal, oil, gas, etc.) into electricity; (2) Transmission—moving the transformed energy from the generation point to the area of use; and (3) Distribution—low-voltage (typically below 34,500 volts) distribution of energy in urban and rural areas. Title 15, United States Code (USC), section 79b defines an electrical utility as:

... any company that owns or operates facilities used for the generation, transmission, or distribution of electric energy for sale ... [a

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<sup>2</sup>Phillips, Charles F., Jr., "The Changing Structure of the Public Utility Sector," *Public Utilities Fortnightly*, January 9, 1986, p. 16.

company is] not to be an electric utility if ... such a company is primarily engaged in one or more businesses other than the business of being an electric utility company....<sup>3</sup>

Clearly, an electric utility may consist of any combination of generation, transmission, and distribution facilities. Within the electric utility industry, electric utilities are further subdivided into private (investor) and public (federal, state, municipal, and cooperatives) owned utilities.

While not required, it is rare when an eligible electric utility is not a member of the North American Electric Reliability Council (NERC). The NERC is subdivided into nine regional councils set up to assist member utilities and improve the reliability of transmission and generation of wholesale electric power. Five of the regions are divided into subregions. Reliability is the ability of the electric utility system to continue to provide electricity in the event of single or multiple component failures. These components may be parts of generation, transmission, and/or distribution facilities. A highly reliable system is one able to provide electricity if two, or more, major components fail without a noticeable or sustained effect. Simply stated, reliability is usually redundancy.

Some NERC regions and subregions are experimenting with economic dispatch (pooling) agreements. Under these agreements, member utilities operate individual generation stations in the most economical manner possible for the electrical load demanded. Multiple metering stations record quantities and direction of power flow

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<sup>3</sup>15 U.S.C. 796(a)(3), *United States Code*, V. 5, p. 380, Government Printing Office, Washington, D.C., 1986.

and member utilities calculate how much power each utility used and how much power each utility generated. Uses are usually customer retail and wholesale demands. However, some wholesale demands are non-cash payments for power used at different times. If so, such payments are usually included (or allowed) in the pooling agreement. This time may have been yesterday, last week, last month, or last system peak (summer or winter). The purpose of pooling agreements is to avoid building new capacity by utilizing existing capacity more efficiently. They also inject free market choice into the wholesale side of electric utility operations.

Pooling agreements are relatively new within the electric utility industry. They have gained real headway only since clear authority to form them was granted by the Public Utility Regulatory Policies Act of 1978 (PURPA). To understand PURPA, it is necessary to understand the recent market history of the electric industry.

## **B. RECENT ELECTRICAL MARKET HISTORY**

In the 1950s and early 1960s, electric rates declined as a result of falling fuel prices and the ability of electrical utilities to take advantage of economies of scale. Public utility oversight and rate setting during this period was very casual and cordial. It consisted mainly of the public utility commission (PUC) meeting and agreeing to rate decreases requested by the electric utilities. In the late 1960s and early 1970s, costs and rates started going up. The primary causes were environmental concerns, increasing fuel costs, and inflation. As

electric rates started increasing, the cordial atmosphere between the public utility commission and electrical utilities began evaporating.

Neither side was truly prepared for an adversarial relationship, but it developed anyway. Public utility commissioners of this period were usually political appointees or elected politicians with scant utility experience. The PUC staff, while knowledgeable, was usually over-worked as rate intervenors (protestors) grew in number and political influence. Public Utility Commissions began questioning the plans, policies, and actions of electric utilities. Friction and resentment developed on all sides. This friction was a by-product of all sides coming to grip with the new realities of the period (environmental issues, increasing fuel prices, legislative fuel bans, litigation, court delays, new mandated rates by legislators, etc.). Public utility commissions had to increase their staffs, electric utilities had to prove their proposals were prudent, and customers became more aware of the costs associated with any action.

Utility rate increases could be postponed directly by PUC action and indirectly by political action. Consumers used both of these paths to challenge the requested utility rate increases. As a result of increased consumerism (in the mid 1970s), electric utilities found conservation measures were the least expensive "new" source of electric power.

Because of the new rates fostered by courts, commissions, and legislatures, cogeneration started looking attractive to industrial customers as new turbine technology was incorporated into smaller

generation plants. Additionally, the new rates mandated by legislatures, *et al.*, meant industrial customers increased their subsidization of non-industrial customers. Cogeneration is typically thought of as the ability to use steam for two separate purposes (e.g., electricity generation and heating). Concurrent with these developments, American industry lost its dominant manufacturing position. Industry had to look at all costs and it found energy to be a significant portion of them. Cogeneration appeared to offer a way to cut costs and regain lost ground in manufacturing. This had the effect of increasing the cross-class subsidization burden of the industrial and commercial customers that remained.

In response to the concerns of consumers, manufacturers, industrialists, *et al.*, and concurrently with the spirit of deregulation, Congress passed the Public Utility Regulatory Policies Act (of 1978). This act was intended to encourage energy conservation, national rate-making standards, and efficient utilization of resources and facilities. The act also granted special status and rights to non-utility producers of electricity. This was done to encourage small power producers and cogeneration development.

Forced by the market to become more efficient, American industry did so. Energy utilities were squeezed to grant concessions to large industrial and commercial customers or lose them as they switched to self-generation and/or cogeneration. This pressure continues today. Large industrial customers are continuing their efforts to fight what they see as unfair cross-class subsidization.

### **C. ELECTRICAL UTILITY INDUSTRY INFRASTRUCTURE**

Electricity is generated at low (typically less than 15,000 volt) voltage levels. Because power plants are usually quite distant from electrical load centers (cities, etc.) and because it is not economical to transport power at low voltage levels, the voltage level of the generated power is increased. The exact voltage level for power transmission is governed by technology and economics. While the transmission grid is spoken of as a homogeneous entity, it is actually composed of transmission lines at many voltage levels. These levels range from over 1,000,000 volts (1000 kV) to 34,500 volts (34.5 kV). The transmission grid is spoken of as a single entity because the individual transmission lines are interconnected via substations and switching stations. These stations control, transform, and direct electrical power to areas of need and give the transmission grid the appearance of homogeneity.

After the generated power is increased to the desired voltage level, it is placed (injected) into the transmission grid. The longer the distance to the point of use and/or the greater the amount of power to be transmitted, the higher the voltage level of the transmission line. Once the power arrives near the point it is to be used, it goes through a series of voltage decreases (step-down transformations). Depending on their size and need, some industrial customers can utilize electricity at these initially decreased (typically 230,000 volt–34,500 volt) voltage levels. However, for the majority of customers it is necessary to reduce the power to levels below 34,500 volts.

After it has been reduced to 34,500 volts, and below, the generated power is considered to be at distribution voltage level. Once at this level, the generated power is transported via the distribution grid through urban and rural areas to its point of ultimate use. It is this distribution voltage level and distribution grid that most consumers are acquainted with. This grid is also what industrial and commercial customers are subsidizing when they are charged rates that don't reflect the true cost of providing their class of service.

#### **D. CROSS-CLASS SUBSIDIZATION**

Cross-class subsidization occurs when one class of consumers is charged a portion of the costs required to provide service to a separate class of consumers. This subsidy is usually considered unfair by those against whom it is assessed. In very competitive industries, this additional charge is often significant enough to be a meaningful consideration when discussing pricing options and long-term manufacturing strategies. In the late 1970s and early 1980s, cross-class subsidies were often the marginal amount that decided whether self-generation or cogeneration was an economical option. Besides being a societal cost assessed on a class of consumers without fully assessing its impact (on critical industries), this policy had the effect of subsidizing consumers able to pay their full share. However, because of political influence and other considerations, public utility commissions and legislators did not assess residential consumers their full share of service costs. This made it economically feasible for large industrial and commercial customers to consider other electricity alternatives.

Most electrical utilities recognize that, as large industrial and commercial customers leave their systems, the remaining customers are going to be assessed higher rates. This was necessary to cover the fixed costs of facilities and overhead necessary to provide the level of service demanded by most classes of customers. Recently, electrical utilities have convinced PUCs that certain cross-class subsidizations embedded in then-current rates are not in the best long-term interests of core customers. Core customers are defined as those unable to leave the electric grid or replace the electrical service offered by the utility. As a consequence, and in recognition, of large customers' ability to leave the electrical system, electrical utilities have evolved a new marketing strategy. They will set rates to cover all variable costs of generating electricity and as much of the fixed costs as possible. This is done to keep as many customers as possible in existing rate bases. If negotiated rates do not exceed variable costs, it is not prudent for a utility to attempt to keep a customer.<sup>4</sup>

When electric utilities offer special rates to customers able to leave their systems, it further exacerbates the situation for those commercial customers who are unable to leave and who still pay the cross-class subsidy. Some of those who elect to remain are able to leave but feel some responsibility and comity for other customers in the system. These customers don't (as a rule) want special rates:

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<sup>4</sup>Interview with John C. Keyser, Vice-President, Marketing and Customer Services, Pacific Gas and Electric Company, San Francisco, CA, August 21, 1987.

They want rates that reflect the true cost of servicing their needs.<sup>5</sup>

The Department of Defense has been one of these customers.

## E. ELECTRIC POWER WHEELING

When electrical generation first began, electrical generation machines (generators) were relatively small. They were located within a few miles of the electrical devices they served and, as often as not, they were direct current—low voltage—devices (much like a battery). As technology developed and electrical demand grew, electric utilities started generating and transmitting alternating current (AC) electricity. This allowed larger, more efficient generating stations to be located further from the electrical demand they were built to serve. As the size of generators grew, and transmission technology developed, generation plants were located further and further away from major urban areas, and loads. This was often the result of economics (e.g., coal mines for fuel supply) or necessity (e.g., hydroelectric).

With the ability to transmit electric power long distances and over large geographic areas came the opportunity to compete with and assist neighboring electric utilities. It was now economical to transmit power over distances greater than most utility service areas covered. As utilities continued to look for methods to improve efficiency and reliability, the economics of mutual support agreements between utilities became quite evident. Rather than build a new plant for a small load lasting only a few hours (peak load), it was wiser to buy power

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<sup>5</sup>Interview with Dr. John A. Anderson, Executive Director, Electricity Consumers Resource Council, Washington, DC, September 2, 1987.

from a utility with temporary excess generating capability. Rather than build a large plant for system reliability (back up), it made more sense for several area utilities to sign support agreements to supply power for temporary or emergency needs. The method of supplying this supporting power is called "wheeling."

Wheeling is a "term of art" describing the capability of transmitting generated power from one designated point to a second designated point through the transmission or distribution lines of two or more intermediate utilities.<sup>6</sup> An example of such a transaction is an agreement between Public Service Company of New Mexico (PNM), San Diego Gas and Electric Company (SDG&E), and several other electric utilities. The agreement obligates PNM to provide 236,000 kw of electric power for use by SDG&E. The power is generated in the northwest corner of New Mexico and transmitted to a switchyard near Phoenix, Arizona. San Diego Gas and Electric Company takes delivery at the switchyard and is responsible for arrangements necessary to wheel the power to the San Diego system. In order to do this, SDG&E has signed agreements with three utilities to wheel power. A few other utilities are involved in the agreement with emergency support and standby roles. The total distance the power must travel is approximately 600 miles. The agreement appears complex, but in

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<sup>6</sup>Schweppé, Fred C., Roger E. Bohn, and N. Michael C. Caramanis, *Wheeling Rates: An Economic-Engineering Foundation*, p. 1-1, United States Department of Energy, Oak Ridge, TN, 1985.

reality the concept is simple. It involves many utilities, yet it is just one of hundreds of such wheeling agreements currently in effect.<sup>7</sup>

Traditionally, when one utility wheeled power for another utility, a red line was drawn on a map (of the transmission grid) tracing a path that theoretically was able to absorb and transport the power that was to be wheeled. In actuality, electrical power did not flow (exactly) in such a manner. Historically, however, the system of red-lining worked sufficiently well to overlook small discrepancies in power flows. This was due to the excess capacity of transmission grid and the electric industry's inability to measure (in real or near real time) what the power flows on the transmission grid really were. Today neither situation normally exists. The transmission grid is nearing full utilization and remote sensors and cheaper computers allow near real time monitoring of the entire transmission grid.

Being able to predict transmission grid behavior is important not only because of wheeling costs but also because of significant reliability, capacity, and protection concerns. For example, a few years ago a new transmission line was brought into service in the New Mexico-Arizona NERC subregion of the Western States Coordinating Council (WSCC) NERC region. When connected, the actual line power flow was in a direction opposite of what was expected. This was quite surprising to the companies involved in connecting the new line. It also affected power flows throughout the entire Western United States

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<sup>7</sup>DHR Inc., *Case Studies in Major Bulk-Power Transactions*, pp. III-1, III-3, Report No. DOE/PE/70027--TI, United States Department of Energy, Oak Ridge, TN, 1982.

from New Mexico to Washington. The unexpected power flows altered the system and transmission grid reliability for the entire WSCC region. In order to operate the new transmission line as intended, many changes had to be made in generator and generation plant dispatch procedures in the WSCC. Transmission grid configuration and protection practices were also affected until additional lines could be brought into service to restore total system reliability to former reliability levels. This incident taught everyone involved much about system reliability and operations. It also highlighted the importance of coordination and disclosure of intentions and operations between interconnected electric utilities.

For many reasons, wheeling does not affect a transmission grid the same way each time power is wheeled. Usually, the effect of wheeling will be substantially the same, given similar system loading. However, because of different consumer demand curve characteristics (daily and seasonal), different transmission grid characteristics (lines in and out of use), and different utility generation schedules (units in and out of service), the actual effects of a wheeling transaction are almost impossible to predict with complete accuracy. If demand curves etc. are known a meaningful prediction is usually possible, but long-term accuracy of the model is not assured.

To calculate the true cost and effects of wheeling power, it will be necessary to evaluate (among other items) the transaction effect on:

1. Line losses due to new power flows;
2. Transmission grid reliability and security;

3. Generation and generator dispatch; and
4. Transmission grid power flow constraints.

The purpose of this evaluation is to encourage utilities to offer wheeling as a service and to compete for electrical loads when it is economical and profitable to do so.<sup>8</sup> In order to establish what the true costs of wheeling are, it will be necessary for the regional and subregional reliability councils, *and their member companies*, to provide power flow data and system models to prospective wheeling entities, other utilities, geothermal power producers, small power producers, and qualifying cogenerators. Historically, this is something utilities are reluctant to do. One point worth observing is that many utilities provide some of this information to educational institutions. This is done to expose prospective utility engineers to the tools and techniques that utilities use in day-to-day operations. While sensitive information, it is hardly proprietary information. Public availability of such information is necessary or it will be difficult, if not impossible, to know who should pay whom when wheeling is accomplished. Because all wheeling displaces power and affects system power flows, the net power loss for some utilities may be lower when they are wheeling outside power than when they are not. In such a situation, the entity injecting the power into the grid should receive some of the overall benefits that other grid users are receiving. This is the corollary of paying for increased system expenses created by wheeling.

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<sup>8</sup>*Ibid.*, p. 1-1.

The ability to transmit, or wheel, power across utility service territories is very important to electric system reliability. This capacity is also crucial to the ability of procurement officers to compete electrical requirements between utilities that are not adjacent to a federal installation. Because it is such a crucial element of both competition and system reliability, extreme care must be exercised in the use of wheeling. The most accurate method of determining the system effects of new wheeling proposals is computer simulation of the proposed wheeling power flows. For verification purposes, all system models and parameters must be available to interested parties for checks and cross-checks. If wheeling proposed in response to a competitive procurement degrades electrical system reliability, it should be rejected. If the opposite is true—system reliability is improved or unchanged by the new wheeling—the proposed wheeling should be allowed if the proposed plan is the best offered.

### **III. COMPETITIVE PROCUREMENT GUIDANCE AND POLICIES**

#### **A. CONGRESSIONAL GUIDANCE**

The Congress finds ... it is in the interest of the United States that property and services be acquired for the Department of Defense in the most timely, economic, and efficient manner. It is therefore the policy of congress that ... full and open competitive procedures shall be used by the Department of Defense....<sup>9</sup> [10 USC §2301(a)]

An executive agency in conducting a procurement for property or services—(A) shall obtain full and open competition through the use of competitive procedures in accordance with the requirements of this title ... and (B) shall use the competitive procedure or combination of competitive procedures that is best suited under the circumstances of the procurement.<sup>10</sup> [*The Competition in Contracting Act of 1984*]

Competition is the philosophy of the American marketplace. Congress has endured, aided, and mandated competition from its earliest sessions. Though it deals specifically with small business, congressional support for competition is best described in United States Code Title 15—Commerce and Trade:

The essence of the American economic system of private enterprise is free competition. Only through full and free competition can free markets, free entry into business and opportunities for the expression and growth of personal initiative and individual judgement be assured. The preservation and expansion of such competition is basic not only to the economic well-being but to the security of this nation.<sup>11</sup>

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<sup>9</sup>10 U.S.C. 2301(a), *United States Code*, Supplement III, v. 1, p. 610, Government Printing Office, Washington, DC, 1986.

<sup>10</sup>Public Law 98-369, Title VII Competition in Contracting, July 18, 1974, *United Statutes at Large*, v. 98.1, 98 Stat. 1175, Government Printing Office, Washington, D.C., 1986.

<sup>11</sup>15 U.S.C. 631(a), p. 557.

Regulated markets are rarely efficient markets. Replacing competition with regulation leads to ineffective and inefficient regulatory processes, uneven and unfair tariffs, burdensome delays, and reliance on rules instead of principles and sound judgment. Congress has recognized these facets of regulated markets and in the recent past has moved to deregulate most regulated industries (e.g., transportation and communications). Congress' affirmation of the public marketplace as the arbitrator of the most effective and efficient method of supplying goods and services is the bedrock of all federal procurement policy.

Procurement of electrical power by the DoD is guided primarily by Public Law 80-413, ASPA, and Public Law 93-369, CICA. These statutes are codified in Chapter 137 (Procurement Generally), Title 10 (Armed Forces), United States Code. Electrical power procurements are affected by court decisions involving not only these cardinal statutes but also:

1. Public Law 95-617, Public Utility Regulatory Policies Act of 1978, (PURPA); and
2. Chapter 647, 26 Statute 209 (1980), as amended, the Sherman Act.

More than any others, these statutes and regulations embody the principals of federal procurement and parameterize the options available to procurement officers.

## **B. FEDERAL LAWS AND REGULATIONS**

This Constitution, and the laws of the United States which shall be made in pursuance thereof ... shall be the supreme law of the land ...

Every state shall be bound thereby, anything in the constitution or laws of any state to the contrary notwithstanding.<sup>12</sup>

In 1974, Congress directed the Office of Management and Budget (OMB) to improve the procurement policies and procedures of the federal government; it did this via Public Law 93-400, OFPPA. An Office of Federal Procurement Policy was established within the OMB on 30 August 1974. Congress gave the administrator of this office authority to prescribe and establish a system of coordinating uniform procurement policies, regulations, procedures and forms in accordance with applicable laws for procurement of property and services.<sup>13</sup> On 1 April 1984, after nine and one-half years of effort, the System of Federal Acquisition Regulations (FAR) became effective.

For procurements of utility services, the FAR directed the continued use of Armed Services Procurement Regulation (ASPR) Supplement Number 5, dated 1 October 1974. The supplement recognizes that utilities generally operate in franchised areas and frequently are in a "sole source" position. It also notes that service must be provided "at reasonable rates without unjust discrimination."<sup>14</sup> However, the supplement is silent as to what unjust discrimination is.

For new military installations where competition does exist, proposals will be solicited from all potential suppliers, even if a GSA area

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<sup>12</sup>Constitution of the United States, Article VI, clause 2.

<sup>13</sup>Public Law 93-400, Office of Federal Procurement Policy Act, August 30, 1974, *United States Statutes at Large*, v. 88.1, section 6, 88 Stat. 797, Government Printing Office, Washington, DC, 1976.

<sup>14</sup>Procurement of Utility Services, *Armed Services Procurement Regulation Supplement Number 5*, pp. 55-102, October 1, 1974.

contract exists. For existing installations, competition is directed when (1) a prospective supplier requests the opportunity to serve, and/or (2) when the department concerned became aware of another potential supplier.<sup>15</sup> In this situation, Supplement Number 5 further directs that competition will be initiated when it is "most advantageous to the Government."<sup>16</sup>

When Congress passed PURPA on 9 November 1978, it significantly altered the regulatory policies and atmosphere of the electrical utility industry. Title I of PURPA establishes eleven rate design standards. The intent of the eleven standards is to encourage: (1) conservation of energy; (2) efficient use of resources and facilities; and (3) equitable rates. One federal standard worth particular note is the cost-of-service standard. This is the first standard listed. It requires class rates to reflect the costs of providing service to that class. It also requires identification of the components used to differentiate the costs of each class of service. The effect of PURPA on utility competition is significant in three ways:

1. PURPA did nothing to affect the applicability of antitrust laws to any electric utility;
2. Special status is granted to small power producers and cogenerators; and

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<sup>15</sup>*Ibid.*, pp. 55-104.1.

<sup>16</sup>*Ibid.*, pp. 55-104.1.

3. State laws affecting the "voluntary coordination of electric utilities, including any agreement for central dispatch"<sup>17</sup> are conditionally invalidated.

The total effect of these (and other) PURPA provisions is to inject competitive forces and competition into the environment of a regulated industry.

The first point above is significant because the US Supreme Court ruled on 22 February 1973 that electric utilities are not immune from antitrust regulation.<sup>18</sup> In the case of *Otter Tail Power Company v. United States*, 410 US 366 (1973), the Supreme Court found:

Use of monopoly power to destroy threatened competition is a violation of the "Attempt to Monopolize" clause of the Sherman Act, as are agreements not to compete with the aim of preserving or extending a monopoly.<sup>19</sup>

The court also found that "Government contracting officers do not have power to grant immunity from the Sherman Anti-Trust [sic] Act."<sup>20</sup> Prior to this case, the prevailing assumption within the electric utility industry was that the Federal Power Act of 1935 (via franchises and regulation) precluded the application of antitrust laws to electric utilities. If Congress did not intend to foster competition with PURPA, the act could have exempted the utility industry from antitrust. Congress did not, and PURPA does not.

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<sup>17</sup> 16 U.S.C. 824A-1(A), United States Code, v. 6, p. 851, Government Printing Office, Washington, DC, 1983

<sup>18</sup> *Otter Tail Power Company v. United States*, 410 U.S. 366 (1973), Supreme Court Reporter, v. 93, pp. 1022-1038, West Publishing Co., St. Paul, MN, 1974.

<sup>19</sup> *Ibid.*, p. 1023.

<sup>20</sup> *Ibid.*, p. 1023.

action, Congress placed conservation and efficient use of resources above purely state concerns, insofar as those concerns restricted a utility company's ability to respond to market realities. Recalling the deregulation of the oil and natural gas industries, it appears that Congress intends to allow electrical utilities a somewhat flexible response in dealing with new competitive impacts in the resource markets (oil, coal, etc.).

Less than one year after its effective date of implementation, Congress directed modifications to the FAR via the CICA. These modifications were intended to increase preference for competitive procurement within executive agencies subject to the FAR. The measure of Congress' seriousness regarding this competitive procurement preference is found in CICA's major directives: (1) it created seven allowable exceptions to full and open competitive procurements; (2) it required the establishment of competition advocates in each executive agency and procuring activity; and (3) it directed each competition advocate's attention to challenging barriers to full and open competition.

The House version of the CICA included an exception to full and open competition for utilities procurement; the Senate version did not. During the reconciliation process, the utilities procurement exception was eliminated. It is certainly not reasonable to conclude from this action, and other actions of Congress, that competition of electric utility services was overlooked during the CICA debate. Since Congress did not grant an exception to full and open competition for

The second point above is significant to competition because Congress exempted qualifying small power producers and qualifying cogenerators (commonly called QFs) from most provisions of PURPA and the Federal Power Act of 1935. It also included special rules requiring electrical utilities to: (1) purchase QF power; and (2) sell QFs' power at fair and reasonable rates, respecting the minimum reliability of QFs even during emergencies. This special status of QFs was underscored when Congress amended the Public Utility Holding Act of 1935 to allow utility companies subject to the act:

... [to] acquire or retain, in any geographical area, any interest in any qualifying co-generation facilities as defined [by PURPA ... The QF with electrical utility in partnership] shall qualify for any exemption relating to the Public Utility Regulatory Policies Act....<sup>21</sup>

This action grants utility companies unambiguous entry into the unregulated field of QFs. They are free to obtain up to 50-percent partnership of any QF, anywhere in the country, irrespective of state laws. This action also has the effect of freeing utility companies to operate in competitive markets.

The third point above is significant because it allows electric utilities to enter into voluntary agreements based purely on the economics of market conditions. Any existing state laws prohibiting pooling agreements are voided if: (1) the agreement is "designed to obtain economical utilization of facilities and resources"; (2) the state laws are not required by federal law; or (3) the state law is not designed to protect the public health, safety, welfare, or environment. By this

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<sup>21</sup>15 U.S.C. 79 k., Supplement III, v. 1, p. 1070.

electrical utilities, the Department of Defense must compete requirements for such services.

One additional note on antitrust is appropriate at this point. Cross-referenced to Chapter 1, Monopolies and Combinations in Restraint of Trade, Title 15, Commerce and Trade, is section 803 of Title 16, Conservation:

Combinations, agreements, arrangements, or understandings, expressed or implied, to limit trade, or to fix, maintain, or increase prices for electrical energy or service are hereby prohibited.<sup>22</sup>

In *Otter Tail*, *supra*, the Supreme Court did not cite this passage specifically. However, in view of federal law developments since 1973 (when *Otter Tail* was decided), the significance of this passage to competitive procurement of electric utility services is very important to determine. Because PURPA allows utilities to enter into economic dispatch (pooling) agreements and unregulated QF agreements, it is reasonable to infer that participating utilities are potential competitors for fulfilling federal power requirements.

Assuming, *arguendo*, that the most effective mix of generating plants will be operated for a given load range, there exists only an accounting exercise to determine what portion of the load "belongs" to each utility. Since economic generation to meet the area load is an area of concern, any one of the participating utilities is capable of "claiming" federal energy requirements as part of "its" load. It is reasonable to infer that 16 USC 803 requires electric utilities to

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<sup>22</sup>16 U.S.C. 803(h), p. 839.

compete for energy sales. Again assuming, *arguendo*, that this is true, as a consequence of *Otter Tail*, *supra*, when economic dispatch agreements are in force competition exists.

### C. COURT DECISIONS

The customer's goal is to obtain the most value for their money. For commodities that often means buying the cheapest offering ... Whether the product is common or unique, customers will base their decisions on the value of the transaction to themselves rather than to the selling firm.<sup>23</sup> [*The Strategy and Tactics of Pricing*]

Article I, section 8, clause 17 of the US Constitution gives Congress the power to exercise exclusive authority over all places purchased for military installations. Department of Defense contracts that disregard state franchises and regulatory controls are often subject to legal challenge. With few exceptions, such contracts are found to be valid. If Congress directs a policy, state actions cannot modify or regulate the activities carried out pursuant to that policy. The exception to this is when Congress relinquishes, or shares, sovereignty so that federal activities become subject to state action (e.g., environmental regulation). There are two basic Supreme Court decisions involving federal procurement and state franchise regulation: (1) *Penn Dairies, Inc. v. Milk Control Comm.*, 318 US 261 (1943); and (2) *Pacific Coast Dairy, Inc. v. Department of Agriculture of California*, 318 US 285 (1943).

In the first milk case, *Penn Dairies*, *supra*, the US Army contracted with a local milk supplier in accordance with competitive

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<sup>23</sup>Nagle, Thomas T., *The Strategy and Tactics of Pricing*, p. 2, Prentice-Hall, Inc., Englewood Cliffs, NJ, 1987.

procurement regulations in force at the time. The Commonwealth of Pennsylvania denied the milk supplier a license to operate (and deliver milk) because the contract delivery price was below the state-regulated minimum. Delivery of the milk was contracted for (and the US Army was operating on) a military encampment located on lands belonging to the Commonwealth of Pennsylvania. The US Supreme Court found:

The burdens placed upon [the] national government as a result of states' regulation of their internal affairs, save as Congress may act to remove them, constitute normal incidents of operation within same territory of a dual system of government, and no immunity of national government from such burdens is to be implied from the Constitution.<sup>24</sup>

In the absence of congressional policy setting "... aside local regulations affecting price in order to secure lowest possible cost,"<sup>25</sup> the court found Pennsylvania's regulation of minimum milk prices "did not impose an unconstitutional burden ... or otherwise infringe the Constitution of the United States."<sup>26</sup>

In the second milk case, *Pacific Coast, supra*, the War Department contracted for the delivery of milk on Moffett Field, California (an area owned by, and under exclusive jurisdiction of, the federal government). The contract was made with a local milk supplier in

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<sup>24</sup>*Penn Dairies Inc. v. Milk Control Commission of Pennsylvania*, 318 U.S. 261 (1943), Supreme Court Reporter, v. 63, p. 618, West Publishing Co., St. Paul, MN, 1943.

<sup>25</sup>*Ibid.*, p. 618.

<sup>26</sup>*Ibid.*, p. 620.

accordance with applicable competitive procurement procedures in force at the time. Sales and delivery under the contract occurred on Moffett Field. The State of California initiated proceedings to revoke the milk distributor's operating license because the contract delivery price was below the state-regulated minimum. In this case, the court found:

The State of California was not authorized to enforce minimum price regulations with respect to milk sold to War Department at Moffett Field on theory that the act regulated only conduct of California's citizens within California Territory, in view of fact that Moffett Field was under exclusive jurisdiction of [the] federal government.<sup>27</sup>

It is interesting to note that in 1941, the State of California memorialized Congress, "requesting passage of a federal law requiring purchasing officers ... to refuse bids for milk at prices below those fixed under California Milk Stabilization Law."<sup>28</sup> The memorial was referred to committees in both the House and Senate, but no congressional action was taken.

Since 1943, the federal government has instituted a comprehensive set of regulations designed to promote fair and reasonable rates through competitive and negotiated procurement. Of these two methods, full and open competitive procurement is preferred. Several additional US Supreme Court cases have underscored the federal government's authority to seek rates substantially equal to, or lower

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<sup>27</sup>*Pacific Coast Dairy, Inc. v. Department of Agriculture of California, et al.*, 318 U.S. 285 (1943), Supreme Court Reporter, v. 63, p. 628, West Publishing Co., St. Paul, MN, 1943.

<sup>28</sup>*Ibid.*, p. 629.

than, those mandated by state regulatory agencies. It is particularly noteworthy that, in these cases, the Supreme Court found, in effect, that the procurement policies promulgated as a consequence of the Armed Services Procurement Act of 1947 established a congressional policy regarding factors such as price. As a result, local regulations that infringe on this federal policy are subject to the supremacy clause (*supra*) of the Constitution.

In a transportation case (a regulated industry), *Public Utilities Com. v. California v. United States*, 355 US 534 (1958), the U. S. Supreme Court held that the State of California could not limit transportation of government property at reduced rates. California allowed reduced rates for US Government property, but only after the Public Utility Commission of California first gave its approval of those rates. The court found this requirement imposed restraints

upon federal procurement officials who, under congressional comprehensive policy governing requirement, are entrusted with discretion to determine when existing rates will be accepted and when negotiation for lower rates will be undertaken.<sup>29</sup>

The court found that the conflict between federal and state regulations was clearly resolved by the supremacy clause (Article 6, clause 2) of the Constitution. Borrowing from an earlier ruling, the court quoted:

It is the very essence of the supremacy to remove all obstacles to its action within its own sphere, and so to modify every power vested in

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<sup>29</sup>*Public Utilities Commission of California v. United States*, 355 U.S. 534, Supreme Court Reporter, v. 78, pp. 446-447, West Publishing Co., St. Paul, MN, 1959.

subordinate governments, as to exempt its own operations from their influence.<sup>30</sup>

In another transportation case, *United States v. Georgia Public Service Commission*, 371 U.S. 285 (1963) the US Supreme Court held that,

Georgia regulations requiring higher rates on shipments must yield to [the] lower rate in [the] contract between carrier and General Services Administration for intrastate transportation of household goods of federal employees.<sup>31</sup>

Lower courts had held that, because the property was not strictly military, the case was controlled by *Penn Dairies, supra*. The Supreme Court rejected this argument and held that, between 1943,

... when *Penn Dairies* was decided, and 1958, when *Public Utilities Comm. of California [supra]* was decided, Congress enacted the Armed Services Procurement Act of 1947, 62 Stat. 21, later codified without substantial change, 70A Stat. 127, 10 USC §2301 *et seq.*, "which extended and elaborated the federal procurement policy of negotiated rates ... We have then a federal procurement policy of negotiated rates for transporting household goods of federal employees—a policy as clear and as explicit as the federal policy for transporting military supplies involved in *Public Utilities Comm. of California, supra*." The Georgia policy, which is opposed to this federal policy, must accordingly give way.<sup>32</sup>

In another milk case, *Paul v. United States*, 371 US 245 (1963), the Supreme Court held California price regulations "were not applicable to sales of milk for strictly military consumption and for resale at

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<sup>30</sup>*Ibid.*, p. 453.

<sup>31</sup>*United States v. Georgia Public Service Commission*, 371 U.S. 285 (1963), Supreme Court Reporter, v. 83, p. 397, West Publishing Co., St. Paul, MN, 1963.

<sup>32</sup>*Ibid.*, pp. 399 and 402.

federal commissaries ...."<sup>33</sup> This case is significant because the Supreme Court found:

References to rates or prices "fixed by law or regulations" in 1962 procurement statute [sic] are merely minor collateral accommodations to those situations where, within limits of federal procurement regulations and the statute, the federal procurement official decided that the practical way to obtain the supplies needed is by following state price-fixing or rate-fixing system, and statute [sic] does not show a congressional purpose to abandon competitive bidding or show a desire to make the federal procurement policy bow to state price-fixing in the face of contrary policy expressed in the Procurement Regulation, 10 USCA. §§2304(g), 2305(a,c) 2306(f).<sup>34</sup>

The court noted that the procurement policies governing the procurement of supplies and services were the same ones governing transportation of commodities (*United States v. Georgia Public Service Commission, supra*). It went on to find that the present procurement regulations have the force of law and "... Its unqualified command is that purchases for the Armed Forces be made on a competitive basis ..." <sup>35</sup> No allowances or exceptions were made for earlier court findings that a federal "hands off" policy existed respecting minimum price laws of the states (*Penn Dairies, supra*). Procurement regulations only provide for the waiver of "cost or pricing" data if prices have been set by law or regulation.<sup>36</sup> This case is also significant because the US Supreme Court noted that it would have disposed of the case

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<sup>33</sup>Charles Paul, Director of Agriculture of California, et al. v. United States, 371 U.S. 245 (1963), Supreme Court Reporter, v. 83, p. 426, West Publishing Co., St. Paul, MN, 1963.

<sup>34</sup>Ibid., p. 427.

<sup>35</sup>Ibid., p. 433.

<sup>36</sup>Ibid., p. 433.

without ruling on the issue of exclusive jurisdiction if some of the milk had not been purchased out of nonappropriated funds. While not plainly stated, it would be reasonable to infer that exclusive jurisdiction is a moot point for goods and services intended for official military purposes.

The last case to be discussed deals squarely with federal procurement of electrical power using competitive procurement procedures. In 1984, the US Air Force solicited bids for additional power requirements at Ellsworth Air Force Base. In response to this action five suppliers submitted bids. The Air Force awarded the lowest bidder (Heartland Consumers Power District) a one-year contract in October 1984. On 24 November 1984, the locally franchised utility (an unsuccessful bidder) filed a complaint with the South Dakota Public Utilities Commission. In the complaint, Black Hills Power & Light argued that Ellsworth Air Force Base is located in Black Hills' service territory and was therefore required to obtain its electrical power (beyond that supplied by an agency of the Department of Energy) from Black Hills.<sup>37</sup> The Public Utilities Commission (PUC) determined a second electric utility (West River Electric Association) with a franchised service area encompassing a portion of Ellsworth was also a party to the proceedings. West River declined participation in the original case. Subsequently, when the controversy ultimately found its way into the

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<sup>37</sup>*Black Hills Power and Light v. Casper W. Weinberger, et al.*, 808 F.2d 665 (8th Cir. 1987), No. 85-5418, United States Court of Appeals for the Eighth Circuit, p. 5.

courts, West River endorsed and adopted the arguments of the United States.

Approximately 12 percent of Ellsworth's land is not under exclusive federal jurisdiction, therefore the PUC determined it had jurisdiction. In order to control power flow and prevent duplication of facilities outside of the lands under exclusive federal jurisdiction, the PUC reasoned it must control all electrical power sales on Ellsworth; controlling the whole to control the part. The Appeals Court rejected this analysis; first, because the PUC could not avoid the supremacy clause of the Constitution (the same argument failed in *Pacific Coast Diary, supra*); and second, because during court proceedings the PUC admitted that it had no authority to control the amount of energy supplied by the Department of Energy's federal marketing agency, Western Area Power Administration (WAPA). It further admitted that WAPA could serve even the non-exclusive (shared) jurisdictional areas of Ellsworth, and in fact had done so in the past. The Appeals Court confirmed the District Court's finding that:

... the rationale that the commission's lack of authority to control the flow of power to state-owned territory will result in unnecessary duplication of electric facilities is without logic. However we need not extend the jurisdiction of the United States beyond the borders of federally-owned territory in order to hold that South Dakota has no jurisdiction to prevent the United states from using competitive bidding to purchase electric service for delivery within the (shared jurisdiction) enclave.<sup>38</sup>

The PUC and Black Hills asserted that state jurisdiction was allowable because there was no interference with federal jurisdiction:

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<sup>38</sup>*Ibid.*, p. 12.

Both the Federal District Court and the Federal Appeals Court found this not to be the case. Both courts found that

... by ordering the United States to contract with a particular utility based on an assigned service area, the South Dakota Public Utilities Commission has directly interfered with the United States' control over the provision of electrical service within the base.<sup>39</sup>

As noted in this case, the Arkansas Supreme Court, in a case involving utilities and territory with shared jurisdiction:

... recognized that allowing the state public service commission to designate, based on specified service areas, the utility from which the United States Government must purchase electricity would interfere with carrying out the operations of the Air Force base.<sup>40</sup>

The Appeals Court noted this was a factually similar case, and that state regulation of utility service to federal installations intrudes upon the exercise of federal jurisdiction.<sup>41</sup>

The last major argument in the case involved congressional intent. Black Hills and the PUC argued Congress mandated that federal procurement officers follow state law in purchasing electricity (Supplement Number 5) and that "... federal law specifically defers to state utilities franchise law and prevents Ellsworth from procuring services through competitive bidding."<sup>42</sup> The Federal Appeals Court found:

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<sup>39</sup>*Ibid.*, p. 12.

<sup>40</sup>*Ibid.*, p. 13.

<sup>41</sup>*Ibid.*, p. 13.

<sup>42</sup>*Ibid.*, p. 14.

After carefully examining the relevant federal law, we must reject this argument. Federal procurement law is specifically designed to ensure "active competition so that the United States may receive the most advantageous contract."<sup>43</sup> [Paul, 371 U.S at 253]

The Federal Appeals Court also found that "... Supplement No. 5 does not require the federal government to defer to a state's regulation of franchise territories; nothing in the new legislation changes this."<sup>44</sup> Thus, the 8th Circuit Court of Appeals found nothing in Black Hills Power and Light's (or the South Dakota Public Utilities Commission's) arguments that precluded federal competitive procurement of electric power. In October 1987, the US Supreme Court refused to consider an appeal of *Black Hills, supra*.

The cases in this subsection can be summarized as follows:

1. In *Penn Dairies, supra*, the Supreme Court confirmed that individual states can regulate sales of goods and services if there is no federal policy regarding them, *and* there is concurrent (shared) jurisdiction on the military installation.
2. In *Pacific Coast Dairy, supra*, the Supreme Court confirmed that the states cannot regulate sales of goods and services when such items are for official purposes on lands without concurrent jurisdiction, even in the absence of a national federal policy.
3. In *Public Utilities Commission of California, supra*, the Supreme Court noted that prior to 1958 (in 1947) Congress had established a national procurement policy. Because of the supremacy clause of the Constitution, individual states could not regulate prices between the federal government and private individuals for contracts dealing with government property.
4. In *United States v. Georgia Public Service Commission, supra*, the Supreme Court expanded the right of the federal government to contract without state interference for movement of private

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<sup>43</sup>*Ibid.*, p. 14.

<sup>44</sup>*Ibid.*, p. 21.

property if the movement of such property was allowed by congressional policy.

5. In *Paul v. United States*, *supra*, the Supreme Court confirmed the right of the federal government to contract for goods and services if such items were for official (or officially sanctioned) purposes.
6. In *Black Hills Power and Light Company v. Casper W. Weinberger, et al.*, the Eighth Federal Appeals Court found the federal government has unqualified authority to competitively procure electric power on lands under exclusive federal jurisdiction. It further found that the federal government need not defer to utility franchise areas granted by state (local) authority when contracting for electrical power.

In essence, the six cases outlined above show that Congress has established a national policy for procurement of goods and services. The US Supreme Court has found this policy allows procurement officers to invoke the US Constitution's supremacy clause. When goods and services are for official, or officially sanctioned, purposes, individual states may not interfere with contracts for the procurement of such goods or services.

#### **D. DEPARTMENT OF DEFENSE PROCUREMENT POLICY<sup>45</sup>**

Competition is fundamental to our free enterprise system ... I call upon each of you to assure that competition is the preferred method of procurement in your departments or agencies.<sup>46</sup> [Ronald Reagan]

... Department of Defense components are to place maximum emphasis on competitive procurement. All personnel involved in the acquisition process from the first identification of the

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<sup>45</sup>Interview with Millard E. Carr, Assistant for Facilities Energy, Office of the Secretary of Defense, Department of Defense, Washington, DC, August 31, 1987.

<sup>46</sup>*Competition in Federal Procurement*, Presidential Memorandum, August 11, 1983.

requirement through the execution of the purchase should recognize this responsibility. Contracts will be placed on other than a competitive basis only when clearly justified.<sup>47</sup> [Caspar Weinberger]

The Department of Defense (Department) has consistently followed a policy of procuring adequate, reliable energy for the lowest available cost. In general, the local utility's cost-of-service tariff has been considered a fair measure of reasonable cost in a regulated environment. Recognizing the benefits of competition, the Department has also recognized that there are societal benefits in the existing federal and state regulatory environment. Implicit in this environment is the concept of the "regulatory bargain": Each utility is obligated to serve all customers in its service area in return for the right to operate as a monopoly in that service area. Cognizant of the societal benefits of monopoly franchises, Department utility policy operates on the belief that federal procurement officers have the same alternatives as any other utility customer.

Notwithstanding matters of jurisdiction, the Department, *as a matter of comity rather than law*, normally procures electric power from the locally franchised electric utility. The only exceptions to this are: (1) where no state-granted franchise exists; (2) where more than one state-granted franchise exists; and (3) where a qualified supplier indicates desire and ability to provide the required electrical service. The Department also holds that there are situations when procurement officers should have the option of competitive procurement:

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<sup>47</sup>Competitive Procurement, Secretary of Defense Memorandum, September 9, 1982.

1. when allowed by current contract;
2. when low-cost federal power allocations exist;
3. when discriminatory rates exist; and
4. when reliability of existing power supplies is inadequate for Department needs.

On 7 May 1986, the FAR regulatory Council (of which the Department is a member) proposed changes (Part 41, *et seq.* and Part 8.300, *et seq.*) to the FAR reflecting the CICA and incorporating the provisions of Armed Services Procurement Supplement No. 5. Within these proposed regulations was the requirement that procurement (contracting) officers perform a market survey to promote full and open competition. The existence of a state-franchised service area, in and of itself, was not sufficient justification to consider the franchise holder a sole responsible source. Investor-owned electric utilities had objections to the proposed FAR regulations implementing CICA directions. Individually and as a group they lobbied Congress to postpone implementation of FAR Part 41 proposals.

The Appropriations Committee conference report directed the Department of Defense not to implement changes proposed for the purchase of utilities until they (the changes) had been presented to, and approved by, the Appropriations Committee.<sup>48</sup> The FY 1987 Defense Appropriations Act states:

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<sup>48</sup>Interview with LTC Bill C. Henry, Esq., Director, Air Force Utility Rate Intervention Team, Tyndall Air Force Base, Panama City, FL, August 27, 1987.

None of the funds appropriated or made available by this act shall be used to implement or enforce the rule proposed on May 7 1986 (51 Federal Register 16988-16991)....<sup>49</sup>

This has resulted in the continued use of existing regulations: FAR Subpart 8.3 and ASPR Supplement No. 5 (1974). Because Supplement No. 5 was not included in the initial FAR revision of the ASPR, it was grandfathered in for a period of two years. When the CICA modified the FAR (and 10 USC 2301 *et seq.*), it demanded competition unless the proposed procurement met one of seven statutory exceptions.

The effect of the FY 1987 Defense Appropriation Act language was to halt full implementation of the OFPPA (FAR) and the CICA. This direction also had the effect of limiting two high-visibility initiatives: (1) third-party venture capital projects (to supply power requirements); and (2) increased DoD reliance on coal for energy requirements. Department of Defense participation in congressional preferences for small power producers and self- or co-generation (as expressed in PURPA) are similarly affected.

By refusing to act or allow the Department to act, Congress will expose the Department and its services to criticism from proponents of increased competition, proponents of decreased regulation, proponents of increased venture capital projects, and critics of excessive federal spending. A significant note is that, while Congress has precluded new FAR regulations from taking effect, it has not relieved the Department from following existing laws and regulations. Current

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<sup>49</sup>Ninety-Ninth Congress, 2d Sess., Conference Report No. 99-1005, *Making Continuous Appropriations for FY 1987*, v. 1, October 15, 1986, section 9111, p. 126, Government Printing Office, Washington, D.C., 1986.

Department policy and reasoning is that existing regulations give sufficient authority for competitive procurement if conditions warrant such action. What is required are guidelines for procurement officers to use in evaluating and reconciling: (1) long-standing congressional policies, and (2) potential adverse local impacts if the local utility is not the successful competitive bidder.

#### **E. PROPOSED CONGRESSIONAL DIRECTION FY 1988.**

None of the funds appropriated or made available by this or any other Act shall be used to procure electric utility service in a manner inconsistent with state law or policy governing the provision of electric utility service, including electric utility franchises or service territories established pursuant to state statute, state regulation, or state-approved territorial agreements, or in a manner inconsistent with provisions of the Federal Power Act of 1935, as amended.<sup>50</sup>

It is reasonable to infer that after careful reading of the above proposed FY 1988 appropriations language— and with a thorough understanding of possible sources of electrical power supply— competitive procurement of electrical power is still possible and required. The key phrase “... inconsistent with state law or policy ...” provides the direction and path that allows fulfillment of both CICA provisions and provisions of the proposed FY 1988 Appropriations Act.

The Federal Power Act of 1935 (as amended) establishes federal regulation of all interstate (and some intrastate) wholesale electric power transactions. It also establishes national rate design standards

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<sup>50</sup>100th Congress 1st Sess., Draft FY 1988 Appropriations Language (April 21, 1987), Title VIII, General Provisions, *Report of the Committee on Appropriations*, p. 277, Government Printing Office, Washington, DC, 1987.

that states must adopt unless state law or constitution prohibits such standards. The act allows each state to regulate intrastate retail sales, service territories, and other related matters.

The Public Utility Regulatory Policies Act of 1978 amended the Federal Power Act of 1935 to encourage a special class of electric power generators. These special generators are commonly referred to as Qualified Facility producers, or QFs. Qualified Facility producers are either cogenerators (less than 30,000 kilowatts) or small power producers (less than 80,000 kilowatts if generated by geothermal energy, unlimited if generated through biomass methods). Generally, QFs are exempted from all or most of the Federal Power Act (16 USC 791a *et seq.*). State laws regarding rates of organizational regulation, and the Public Utility Holding Company Act (14 USC 79 *et seq.*).<sup>51</sup> In addition, Congress directed state regulatory bodies to enact rules requiring electrical utilities to provide backup power to QFs and buy (or wheel) energy offered by QFs in a fair, reasonable, and non-discriminatory manner. In establishing and encouraging QFs, Congress was undoubtedly aware of the unique status it was granting them. From this, it follows that Congress was also aware that QFs would compete for customers in some utility franchised service areas.

All parties—Congress, state regulators, and electric utility executives—recognize that military installations have the right to generate their own power if circumstances warrant it. In an effort to allow such

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<sup>51</sup> 16 USC 824a.-3(e)(1), p. 853.

actions, and to reduce federal outlays, Congress established a program allowing private individuals to provide required production facilities. These private projects are referred to as 3rd Party Venture Capital Projects, or sometimes just Venture Capital (proposals, contracts, etc.). Procurement officers are allowed to contract for venture capital energy for periods of up to 30 years. This extreme amount of time was necessary to ensure venture capitalists access to low-cost financial assets, and to ensure that the federal government receives full value and benefit of venture capital projects. In establishing such authority and procedures, Congress was undoubtedly aware that such projects would compete with franchised utilities for federal customers, in both wholesale and retail markets.

Inasmuch as state laws generally allow customers the option of self-generation and third-party generation, and/or cogeneration, it is reasonable to infer that Department of Defense customers also have such options. Additionally, it would be reasonable to infer that Department installations have: (1) the ability to compete electric power requirements when the defense installation has two or more franchise areas adjacent to its boundaries; and/or (2) have the authority to apply for, and use, federal power allotments administered by Department of Energy marketing agencies. The only competition that may be restricted for FY 1988 is that which pits the locally franchised electric utility against an electric utility which does not have a service area adjacent to a military installation boundary. This, too, is somewhat mitigated since the federal government would have the same

options as other customers to petition the state regulatory commission for authority to allow other utilities to serve its electric power requirements. An example of this type of competition is occurring in New York, where General Motors received approval from the New York Public Service Commission to allow such a transaction. General Motors is also seeking approval for a similar competition in the Indiana, Michigan, Ohio Tri-State Area.<sup>52</sup>

Two types of electric power contracted for by the Department of Defense are unaffected by this appropriations act direction: wholesale power and unregulated power. An additional "type" of power that also appears to be unaffected is new power requirements. The effect of the appropriations act on new power requirements is uncertain because congressional concern is focused mainly on existing electrical power requirements and the rate shock effects of losing such requirements. Since "new" loads are not part of the rate base, there would not be any rate shock if these loads were competitively procured.

Further discussions on the possibilities of competitive procurement of electric power in the face of this proposed legislation are almost endless. Three important points are noted. First, the FY 1988 proposal is not yet law. Second, if the proposed language is enacted exactly as proposed, many competitive procurement options exist. In addition to the options outlined above, there are options available in each of the individual states. Third, appropriations acts are valid for

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<sup>52</sup>Weberman, Ben, and Snitzer, Adam, "Freewheeling," *Forbes*, August 10, 1987, pp. 36-37.

only one year. The Department of Defense should continue to plan and organize strategies that will allay congressional, state regulatory, and electric utility industry fears of severe rate shock and simultaneously fulfill present and historical preferences for full and open competition in procurement of electric power. While the CICA (and 10 USC 2301 *et seq.*) allows restrictions on bidders in the procurement process, the intent of such restrictions was to increase competition, not restrict it. Department of Defense efforts should be directed toward the overall congressional mandate of increasing competition.

#### **IV. ANALYSIS OF COMPETITIVE PROCUREMENT OF ELECTRICAL POWER**

##### **A. COMPETITIVE ENVIRONMENTAL CONCERNS**

Competitive conditions existing at Department of Defense installations are a mixture of variations and situations. The variations deal with competition: There either is or is not competition. The situations deal with jurisdiction: There is shared (or concurrent) federal/state jurisdiction, or there is exclusive federal jurisdiction.

If there is exclusive federal jurisdiction, the ability of federal procurement officers to competitively procure electric power is *only* dependent upon whether competition does or does not exist (*Pacific Coast Dairy, supra*, and *Black Hills, supra*). If there is shared federal/state jurisdiction, the ability of federal procurement officers to competitively procure electric power is dependent on two determinations. The first determination is what the ultimate use of the electrical power will be: appropriated fund activities, federal resale activities, or nonappropriated fund activities. If the first determination is for either of the first two activities, the second determination is whether competition does or does not exist (*Pacific Coast Dairy, supra*; *Black Hills, supra*; *United States vs. Georgia, supra*; and *Public Utilities Commission of California vs. United States, supra*).

If the first determination for the ultimate purpose of the electrical power is for a nonappropriated fund (NAF) activity, competition is still possible but additional questions must be answered (e.g., how

complicated will it be to compete; is it cost-effective to compete). If the procurement official decides it is in the best interests of the United States to compete for the electrical power needs of a NAF activity, *Black Hills*, *supra*, and *United States vs. Georgia*, *supra*, appear to support the federal government's right to do so. However, *Penn Dairies*, *supra*, and *Paul v. United States*, *supra*, appear to restrict such federal government rights. The deciding factor in such conflicts would appear to be the court's view of congressional intent and whether the Competition in Contracting Act and the Office of Federal Procurement Act of 1974 are clear and explicit federal policies allowing such activity. If there are not clear federal policies, competition is not possible. If there are clear federal policies (and *Black Hills*, *supra*, buttresses such an argument), the second determination must be whether competition does or does not exist.

If competition does not exist, the only alternative is to stay with the existing supplier. This determination is not easy to make. To properly document such a decision, a market survey should be made. Properly conducted, a market survey would note:

**1. The Existence of Franchised Service Areas Adjacent to or Encompassing the Federal Installation**

If there are two or more service territories adjacent to the Department installation, competition is possible, and in fact required. If there are one or more service territories close to the Department installation, competition may be feasible if wheeling is economical.

**2. The Existence of Transmission Lines On (and Near) the Federal Activity, and the Owner(s) of Such Lines**

Transmission lines on or near Department installations may be owned by more than one utility. "Near" is a term best defined by the specifics of each situation. If the electrical power requirement is large, "near" could mean any transmission line within 10 miles, or more. If the electrical power requirement is small, one-half of a mile may not be "near" enough. The force driving this parameter is economics. As discussed earlier, SDG&E procured power from a generator 600 miles distant. If the economics of any situation show competition to be in the federal government's best interest, the Sherman Act cross-reference of 16 USC 803(h) appears to obligate electric utilities to compete.

**3. The Existence of Economic Dispatch (Pooling) Regions and Utilities Who Are Members of Such Agreements**

If the local utility is a member of an economic dispatch agreement, there will not be any change in who generates the power—only who is paid for it. This cardinal fact is noted by even the Edison Electric Institute,<sup>53</sup> an electrical utility lobby and association opposed to competitive procurement of electrical power by anyone. For market survey purposes, the federal government will not structure the details of any possible proposal. To do so may appear to give favor or direction to one particular proposal or approach. It is sufficient to know

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<sup>53</sup>Public comments to the FAR Secretariat by Douglas C. Bauer, Senior Vice-President, Edison Electric Institute, Washington, DC, September 5, 1986, p. 18.

that competition exists and the federal government is able to take advantage of it. If the Department installation is in an economic dispatch area, competition exists.

**4. The Size of the Electrical Power Demanded, and the Applicability/Adaptability of Such a Demand to PURPA QF Suppliers**

If the amount of electrical power demanded is small, competition may not be in the best interests of the federal government. In this situation, negotiated procurement is allowed. If the amount of electrical power demanded is very small (e.g., less than \$25,000 per year), neither competitive nor negotiated procurement is required. This certainly makes sense if the power is for an office in an urban setting. However, if the electrical power demand is large and/or it can be combined with steam load requirements, the total power requirement at that Department installation may be suitable for self-generation, third-party venture capital projects, or QF generation. If this is the case, competition exists and competitive procedures must be used when it is most advantageous for the Department to do so.

**5. Possibility of Wheeling Power from a Distant Electrical Power Producer**

If a non-adjacent electric utility or federal power marketing agency has sufficient low-cost power to absorb wheeling costs, the possibility of wheeling power and competition exists. Wheeling costs are the key factor in this situation. Because of *Otter Tail, supra*, the locally franchised utility would find it very difficult to refuse wheeling requests. It is a commonly held, and accepted, view that the utility

wheeling the power should be compensated for doing so. This is true if, in fact, the wheeling utility experiences increased costs (line losses). But, as discussed earlier, not all wheeling will result in increased costs to the wheeling utility. If the wheeling utility's costs are decreased by wheeling power, the other utility(ies) involved should be compensated for such savings.<sup>54</sup> Thus, since wheeling cost can be either positive or negative, it is very difficult to analytically determine when wheeling is a viable option. The easiest method for establishing the applicability of this option in uncertain circumstances is to actually compete the electrical power requirement. Such an action will determine *empirically* the existing competitive environment.

The above list is not all-inclusive; it is intended to highlight the purpose of the market survey—determination whether there is sufficient competition in an area to warrant the use of full and open competitive procurement procedures. If competition is not warranted, negotiated procurement practices may be used.

A very important federal government option is significant to note at this point: If competition does not exist (and circumstances warrant such action), the contracting officer is authorized to foster competition by limiting the number of sources from which bids and proposals are accepted.<sup>55</sup> Sometimes when the federal government wants a second source for competition purposes (e.g., missiles, rifles),

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<sup>54</sup>Schweppé, *et al.*, p. 1-5 and 1-6.

<sup>55</sup>10 USC 2304(c)(2), p. 613.

the only way to achieve the second source is to prohibit bids from the dominant supplier. For utility procurement, such an action would be very unusual. However, the contracting officer is authorized to take such action if price discrimination is excessive, reliability of the electrical power is critical, or if doing so would increase or maintain competition.<sup>56,57</sup> While such logic is not normally applied to electrical power procurement, nothing in the CICA or Chapter 137 (Procurement Generally) of Title 10 precludes such an application. Rather, the CICA directs competition advocates to find such logic to challenge the status quo and increase competition in procurement practices.

## **B. COMPETITIVE ENVIRONMENTAL CONSIDERATIONS**

The law is hard, but it is the law. [*Roman Proverb*]

A federal procurement officer must consider many, sometimes conflicting, factors when evaluating procurement options. It is necessary to understand market and governmental trends, conditions, and adaptabilities. In addition to normal commercial procurement practices, federal procurement officers must understand congressional intent and policy. The policies and direction given by Congress do not always affect actual practices as Congress intended them to. This is a normal consequence of complex and overlapping policies.

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<sup>56</sup>10 USC 2304(c)(3), p. 613.

<sup>57</sup>Public Law 98-369, section 303, 98 Stat. 1175.

Today, federal procurement officials are facing a dilemma. Historical congressional policy and direction has been to encourage full and open competitive procurement. When the FAR secretariat published regulations directing methods of competitive procurement for electrical power— in clear, unambiguous terms— Congress directed the suspension of the new rules. In doing so, Congress directed the continued use of existing rules. But the existing rules (FAR subpart 8.3 and ASPR Supplement No. 5) were grandfathered in for only two years (until 1 April 1987). If it is accepted that the FY 1987 appropriation language extended this grandfather period, what still must be resolved is the intent of Congress: ASPR Supplement No. 5 allows competition of electrical power when competition is present. The ultimate question for the Department to decide is whether to compete electrical power or buy from the franchised utility; both options appear to still exist.

Less stratified, but no less important, are four additional major considerations affecting the cost and quality of electric power.

### **1. User Requirements and Load Characteristics**

Reliability, stability, and interruptability are the most important long-term concepts. Immediate user attention is typically focused on substation ownership, service metering voltage, kilowatt demand levels, energy demand levels, special service requirements (voltage regulation, filtering, etc.), and the ability to handle projected load growth and load surge requirements.

## **2. Contract Size Thresholds**

If the required electric load is specialized, small, or erratic, it may not be economical to competitively bid. Contract bidding and administration costs should be included in any economical analysis used to support the determination to competitively bid an electric power contract. Another consideration may be the ability to split a very large electrical requirement into a series of smaller contracts. This would allow more uniform training and staffing of procurement offices. It also might increase competition opportunities for small and economically disadvantaged businesses. It would allow easier justification of excluding certain offerors if required to increase competition and allow unsuitable and nonperforming contracts to be terminated with less inconvenience to the federal government. This step would also allow experimentation with the type of contract which would assist the contracting officer in determining what the true fair and reasonable cost of electric power is.

The negative aspect of more (and smaller) contracts is the increased workload that is required. There is not much difference between a utility procurement of two million dollars and one for ten million dollars. There is, however, quite a difference between one two-million-dollar contract and five two-million-dollar contracts. Another parameter to be considered is how to differentiate the performance of multiple commodity suppliers. All are delivering a homogeneous commodity that is used immediately. An additional contract to monitor performance or contract-specific language requiring

coordination and cooperation are possibilities. Fortunately, such agreements/arrangements already exist between electric utility companies. The technical ability to monitor individual contract performance is only one of many important contract details. It is mentioned here to remind everyone concerned that there are downside risks and difficulties to be considered.

### **3. Contract Time Periods**

The length of any contract must be carefully considered. Existing statutes allow contracts for energy services to last for periods of up to 30 years (with prior Secretary of Defense approval).<sup>58</sup> Generally (e.g., US Navy), contracts for periods of greater than ten years require prior approval of the Service Secretary. If the primary intent of the contract is to assist QFs, or third-party venture capital contractors, a long contract time period may be correct. If the primary intent of the contract is to take advantage of the flexibility and cost advantages afforded by competitive contracts, shorter time periods with contract options may be more appropriate. Many alternatives are available. The one chosen must make sense for the specific situation and effects desired. Long and short time periods have specific advantages and disadvantages unique to the time period selected. Irrespective of the exact time period, due consideration must be given to expected mission characteristics, economic trends, electrical reliability, electrical supply security, and reprocurement of electrical

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<sup>58</sup>10 USC 2394, United States Code, v. 3, p. 388, Government Printing Office, Washington, DC, 1983.

requirements at the end of the proposed contract period. A mixture of demand and indefinite term contracts would offer installation procurement officials the greatest level of flexibility. The exact type and number of contracts depend upon the considerations listed above, and considerations that are contract specific.

#### **4. Contract Methodologies**

Competitive bidding of electric power is not the procurement norm. Because of the criticality of this commodity, evaluation of bid proposals is judicious. The many factors of electrical service lend themselves to detailed design specifications. However, a mixture of design and performance specifications is more appropriate. User requirements such as voltage stability can be provided in more than one manner. Dictating specific methods to achieve contract requirements unnecessarily restricts proposals. Such restrictions offer avenues for rejected bidders to protest awards. Restrictions in procurement contracts should receive careful consideration before inclusion. Inasmuch as evaluation of all proposals is (probably) necessary, multi-step and competitively negotiated, performance-oriented design contracts are preferred.

### **C. PROCUREMENT STRATEGIES**

Long-term availability of electric power and the regulatory bargain are two considerations often brought forth to discourage the competition of power requirements. While more assertion than argument, these considerations deserve attention. A strategy that confronts both issues is to reserve (for the local utility) a portion of the total required

demand. This fenced demand could be the minimum uninterruptable installation requirements or the remainder of the total installation requirement. It could be off-peak power or any other identifiable power requirement.

The purpose of such a strategy might be to stay with the local utility for strategic and comity reasons. It might cushion the local utility and utility ratepayers from the effect of an immediately competitive environment. This might result in higher short-term electrical power costs ~~for~~ the Department of Defense. Properly handled, such a policy might also increase the total number of electric power suppliers. This situation could develop naturally, or it could be assisted by judiciously restricting certain offerors from individual contract competitions. It is not necessary that this occur; it is very important that it *can* occur.

The ability to verify cost fairness and reasonableness could be a side benefit of slowly easing into a major or fully competitive procurement environment. A 1986 cost-of-service survey by the Electricity Consumers Resource Council (ELCON) assessed cross-class subsidies paid by industrial customers. On average, industrial rates were six percent higher than strict measure of cost allocation indicated they should be. The numbers used in the study were from 1984, the latest year with full utility sales and revenue results.<sup>59</sup>

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<sup>59</sup>Cost-of-Service Survey, *Profiles in Electricity Issues* No. 1 (March 1986), p. 5, Electricity Consumers Resource Council, Washington, DC.

In FY 1986, the Department of Defense paid over \$1.644 billion for commercial electric power. Applying the six-percent ELCON amount as an average suggests that the Department paid over \$98.6 million in cross-class subsidies during FY 1986. Considering the high cost areas of many Department military installations, this figure can be considered quite conservative. In California, the ELCON report noted the average rate-of-return difference between residential and industrial customers was 11.6 percent: The difference between the average industrial and average system rate of return was 7 percent.<sup>60</sup> Competition-influenced negotiations between San Diego Gas and Electric Company and the US Navy currently underway appear to be producing estimated savings of \$11 million per year, or approximately 13 percent of the US Navy's yearly bill.

Multiple contracts for definite and indefinite terms could induce utilities in every area to compete with greater enthusiasm. The effect of losing part of a governmental load would not be as severe as losing the entire governmental load. As each contract bid period was closing, the competing utilities could examine their individual situations and adjust their bids appropriately. A utility that lost a "local" load one week could be partially, or completely, compensated if it won a "distant" load the next week. Such competition would also allow small businesses to compete for part of the federal electrical power requirements on more equal footing with large utilities. This would

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<sup>60</sup>Ibid., p. A-1.

have the added benefit of encouraging third-party venture capitalists and PURPA-allowed QFs. These are two high-interest congressional initiatives. If these events were to occur, they would have the effect of increasing local, and system, electric power reliability. Reliability would increase because of reduced dependency on the high-voltage transmission grid and on very large single-site generators (e.g., Three Mile Island, PA; Seabrook, NH; Shoreham, NY). For some areas, small power producers might also provide added margins of safety if large power plants require restart (e.g., plants taken off-line by earthquake, transmission grid failures, or switching station failures).

One strategy already being used, but as of yet not fully exploited, is cogeneration. This option allows use of secondary steam cycles for heating needs, industrial purposes, peaking loads, and load shifting. If the cogeneration site is within the military installation boundaries and security zones, the added benefit of increased energy security is achievable. These benefits have been recognized and programs to achieve them have been authorized and utilized. They are mentioned here to remind procurement strategists that competitive procurement strategies can, should, and must be integrated into existing programs.

One final strategy consideration is electric utility industry pressure for deregulation and competitive electric sales. In the past several years, electric industry strategists have foreseen the opportunities afforded by deregulation of generation and transmission activities. Public Service Company of New Mexico has applied to its regulatory commission for permission to restructure itself. The utility wants to

separate its generation, transmission, and distribution activities into separate businesses. Duke Power Company in Charlotte, NC, recently proposed to buy and operate a nuclear generating plant in California. Chicago's Commonwealth Edison Electric Company has applied to the Illinois Regulatory Commission for permission to spin off a portion of its nuclear generating capability.<sup>61</sup> These, and other, electric utility companies recognize that the past regulatory environment supporting total monopolies is gone. It is a casualty of technology advances in generation and transmission fields. It is also a victim of its own abuses: Regulatory procedures, delays, and obstruction of industry innovations, methods, and rate relief have increased the costs electric utilities absorb and rate-payers bear.

In 1978 (via PURPA), Congress injected seeds of change into all utility industries. The electric utility industry is experimenting with open-market techniques in generation and transmission. A consensus is forming that generation is no longer a true monopolistic activity and should be deregulated completely. A similar consensus is evolving to turn the power transmission grid into the status of a "common carrier." This is what happened to the natural gas and oil industry. While many regulators and electric utilities will oppose these moves, it appears that economic and deregulatory forces will eventually force such moves. The last regulated electric utility activity—distribution—appears to be a true natural monopoly. No consensus or acceptable

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<sup>61</sup>Weberman, p. 36.

argument has been found that would support the deregulation of this activity. Most Department of Defense installations operate their own distribution grids independent of the local electric utility. The regulation of, or lack thereof, of distribution grids has little to no effect on the Department of Defense.

#### **D. ELECTRICAL UTILITY INDUSTRY OBJECTIONS**

A complete listing of all the objections the electric utility industry has to competitive procurement of electric power is not intended in this study. Comments on proposed changes to the FAR, published in the Federal Register, ran several feet in depth. The comments below are the major ones distilled from 77 pages of comments by the Edison Electric Institute, as submitted to the FAR Secretariat on 5 September 1986. The Edison Electric Institute is an association of private investor-owned electric utilities. It acts as a lobbyist presenting the majority position of its member utilities.

- 1. The Institute Believes that the Proposal to Compete Power Requirements is Inconsistent with Existing Federal and State Laws and Jurisdictions.**

Their position is that there is nothing mandated in the CICA that requires electrical power to be competitively procured. Neither is there anything in the CICA or the OFPPA that directs actions overturning the existing federal/state regulatory framework based on the 1935 Federal Power Act.

This is the strongest of the institute's positions and arguments. Unfortunately, it is an argument without thrust. As outlined in

Chapter II, congressional policy, federal law, and US Supreme Court decisions all support the opposite view. The point is not that the laws require competitive procurement of electrical power: They do not allow for the noncompetitive procurement of electrical power unless certain conditions exist. When and where such conditions do not exist, electrical power must be competitively bid. Congressional direction goes farther still—procurement officers must challenge existing situations when competitive procurement of goods and services is not possible. This is the mandate that congressional policy codified into Public Law 98-369, the Competition in Contracting Act of 1984,<sup>62</sup> Title 41, USC 418b,<sup>63</sup> and Title 10, USC 2318.<sup>64</sup> Thus, calling a cow's tail a leg does not make it one, *cadit quaestio*.

**2. The Institute Believes That, if Power Requirements are Competitively Procured and Federal Customers Leave the Local System, the Remaining Ratepayers Will See Increased Rates.**

This will be true if the utility loses competitive procurement contracts of previously negotiated electrical power requirements. This will also be true if the federal customer were to turn to self-generation or cogenerated power. Additionally, this will be true if the federal installation accepts a third-party venture capital contractor's

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<sup>62</sup>Public Law 98-369, section 20(b), 98 Stat. 1198.

<sup>63</sup>41 U.S.C. 418b, United States Code, Supplement III, v. 3, p. 539, Government Printing Office, Washington, DC, 1986.

<sup>64</sup>10 USC 2318, Supplement III, pp. 623, 624.

proposal or PURPA QF contractor's proposal for power. To argue that competitive procurement of electric power may raise remaining ratepayer rates is acceptable. To ignore the fact that the same effect can be brought about by other legal and valid methods is pure sophism.

Ignored in the institute's position are those utilities that win competitive procurements. If the power requirements are new to that utility, its ratepayers should experience an immediate benefit in the form of lower rates. This will occur for exactly the same reasons the losing utility's ratepayers will experience a rate increase. However, as competition forces increased efficiency, the losing utility's ratepayers will also experience some benefits from the competition. In the long run, all parties will benefit from the increased efficiency and economics of the situation. An additional point not mentioned in the institute's position is that increased rates will result when large private customers choose to leave the rate base. The institute is trying to deny the federal government rights private companies and individuals already enjoy.

**3. The Institute Believes the Overall Reliability of Electric Service Will be Degraded.**

This will occur because competitive procurement of electric power will exacerbate the difficult task of forecasting future electrical demand. Reliability of service will also suffer if "distant" power is wheeled by the power transmission grid.

Both of these arguments have a shard of truth. The transmission grid argument is the strongest. Bid proposals should be rejected

if power flow analysis shows the planned procurement reduces overall system reliability. This is one reason power flow analysis data must be made available to all interested parties. However, not all bid proposals will destabilize the transmission system. As discussed in Chapter II, some wheeling proposals have the capacity to strengthen system stability. Neglecting this possibility is not logical if system reliability improvement is a goal.

The forecasting argument is without real merit. Adding one more factor to the hundreds utility forecasters already contend with is not onerous. Any attempt to forecast trends five to fifteen years into the future is replete with uncertainties. The current supply surplus is evidence that past attempts to forecast today's demands were unsuccessful. Difficulties in forecasting future trends will not go away if competitive procurement policies are spiked. However, such difficulties may be mitigated if there are multiple small to medium suppliers of electricity available to provide a cushion if demand is underestimated. Thus, again, *cadit quaestio*.

**4. The Institute Believes that the Obligation-to-Serve Principle of the Regulatory Bargain is Being Abused by the Federal Government's Proposal to Compete Power Requirements.**

This argument notes that existing facilities were built to serve existing loads in defined service territories. It further postulates there might be legal, technical, and operational repercussions if wheeling (retail) power were allowed. To overcome such

repercussions, it may be necessary to build additional—perhaps duplicate—transmission capacity.

The argument against new transmission capacity is absurd. If the power to be wheeled is inexpensive enough to absorb such costs, the local utility may have been very poorly managed. Holding any customer captive to inefficient producers because their management has been ineffective is ludicrous. Holding the federal government captive to such management would appear (to most sensible individuals as) irresponsible. If new transmission capacity is built, it is most likely to improve transmission grid and system stability. The institute's argument of system reliability (weak reliability) and operational considerations (duplicate facilities) are at cross-purposes in some respects. They are more arguments based on hardship to the electric utility industry than arguments based on relevant facts.

This still leaves the considerations of possible repercussions and the obligation-to-serve principle. Repercussions for a changed state of affairs seem baseless. The US Supreme Court has held individual contractors blameless for using their property to contract with the federal government (*Pacific Coast Dairy Inc. v. Department of Agriculture of California*, 318 US 285 (1943), et al.).<sup>65</sup> For states to hold the federal government responsible for exercising its right to conduct business without state interference is in violation of the supremacy clause of the US Constitution.

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<sup>65</sup>*Pacific Coast Dairy Inc.*, p. 628.

To argue that existing facilities were built for existing loads is to argue for unchanging conditions—it isn't possible. If the federal government requires something site specific (e.g., a second transmission feeder), then it should be held responsible for the specific need costs. The argument that an industrial customer must stay with a utility because the utility has made long-term decisions for investment is improper. This is merely an argument for monopoly profits. Most commercial customers have the long-term option of leaving a geographic service area; as a rule, Department of Defense installations do not. Restricting Department options to seek less-expensive goods and services is in direct conflict with 178 years of congressional direction.

This direction dates from the 10th Congress, March 3, 1809:

... All purchases and contracts for supplies and services which are or may, according to law, be made by or under the direction of either Secretary of the Treasury, the Secretary of War, or the Secretary of the Navy, shall be made ... by previously advertising for proposals....<sup>66</sup>

Additional points disputing this argument are possible but hardly necessary. The federal government is allowed to use its position and size to procure goods and services at prices most advantageous to itself. It need not apologize for this ability. If the impact of leaving a local service area is economically catastrophic in the short term, special contracting arrangements can be made. Curtailing a significant federal right is a very harsh long-term response for possible (not probable or certain) local economic harm.

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<sup>66</sup>*United States Statutes At Large*, v. 2, chapter 27, section 5, p. 536, Charles C. Little and James Brown, Boston, MA, 1845.

## **V. CONCLUSIONS AND RECOMMENDATIONS**

### **A. OVERVIEW**

Competition in the Department of Defense has undergone a philosophical metamorphosis. The catalytic agent of this change was Congress. The Office of Federal Policy Procurement Act and the Competition in Contracting Act are the mechanisms that ensure continued nurturing of this new philosophic outlook.

While the Department of Defense was experiencing a competition catharsis, the Electric Utility Industry was experiencing a similar regulatory metathesis. The catalyst of this transformation was the Public Utility Regulatory Policies Act. While not directly applicable to Department of Defense procurement policy, this act provided the mechanisms for competition in the electric utility industry (economic dispatch and QFs). Technology has provided the means, and Congress has provided the authority, for interested parties to engage in competition with established utilities. While not intuitively evident, the competition catharsis of the electric utility industry is well underway.

### **B. CONCLUSIONS**

This study has revealed a number of conclusions relevant to competitive electrical power procurement.

**1. The Department of Defense Policy of Comity Regarding Utility Purchases is in Conflict With Existing Statutes and Regulations.**

The Competition in Contracting Act, et al., and relevant United States Code clearly require competition of electric power procurement. Congress has historically required competition whenever possible.

**2. The Department of Defense Has the Authority to Competitively Procure Electric Power.**

Congress has directed a policy of competitive procurement. The US Supreme Court has found that this policy is legal. Further, the Supreme Court has held (due to the constitutional supremacy clause) individual states cannot interfere with or hinder this policy. If the electric power is to be used for official purposes, the Department of Defense's authority to competitively procure such power is effectively absolute.

**3. Many Conditions Exist Which Support Competitive Procurement of Electric Power Requirements.**

In addition to the often-cited conditions of no franchise area or more than one supplier in a franchise area are: (1) existence of qualifying facility power producers; (2) self-generation or cogeneration; (3) third-party venture capital; (4) discriminatory rates; (5) supply reliability; etc. Congress has also enacted statutes that allow procurement officers to restrict potential bidders to enhance and foster the federal government's ability to competitively procure goods and services.

**4. The US Supreme Court Ruling That Utilities Are Subject to Antitrust Laws Profoundly Enhances Competition Abilities.**

The Department of Defense does not usually have grounds to request Federal Energy Regulatory Commission wheeling orders under the Public Utility Regulatory Policies Act. *Otter Tail*, *supra*, gives the Department the ability to request wheeling orders in federal court, under federal law, if local utilities refuse to honor potential bidders' requests to wheel power. Further, this ruling prohibits electric utilities from making agreements, or reaching understandings, not to compete if they have the ability to compete.

**5. Competitive Electric Power Procurement Will Result in Fair and Reasonable Rates For All Ratepayers.**

Current rate and tariff schedules are biased against non-residential customers. Electric utility industry and state regulatory opposition to competitive procurement proposals are an attempt to continue cross-class subsidization of residential customers. Such rate inequities are hidden federal subsidies the Department of Defense pays to state and local governments and ratepayers. Electric utility industry statements that local rates will increase if large customers compete electrical power purchases are assertions and arguments for unevenly assessed monopoly profits. Further, such arguments are appeals based on inconvenience and passion rather than relevant federal rights, procurement law, or obligations to all United States citizens—not just those living around military installations.

**6. Current (FY 1987) and Proposed (FY 1988) Defense Appropriation Acts Do Not Totally Restrict Competitive Electric Power Requirements.**

The language of the FY 1987 act prohibits rigid codification (in the FAR) of the Competition in Contracting Act. The FY 1987 language still allows electric power to be competitively procured if the procurement officer is aware that competition is possible. Further, and quite significantly, the direction contained in the language does not relieve the Department of Defense from adherence to the Competition in Contracting Act (and relevant federal statutes). The proposed language of the FY 1988 act, while slightly more sweeping, does not explicitly give up the right of supremacy or competitive procurement of electrical power. Neither act gives states unambiguous authority to regulate power sales to Department installations on land under exclusive federal jurisdiction. Because of the national procurement and energy impact of this type of restriction, the matter is likely to be debated before the full Congress. National procurement and energy policy is unlikely to be left to only the Defense Appropriations Committees of the House and Senate.

**C. RECOMMENDATIONS**

**1. The Department of Defense Should Develop and Issue Policy Directing Competitive Procurement of Electric Power in Accordance With Existing Laws and Regulations: The Policy of Comity Should Be Dropped.**

This policy should address contract strategies, timing, size, etc. It should also address the subject of local impacts and the

importance of mitigating those impacts when possible (e.g., multiple contract awards). The policy should avoid giving rigid instructions on procurement methods.

**2. The Department of Defense Should Initiate an Integrated Electric Power Strategy Group.**

Guidance on strategy should direct evaluation of all major and relevant factors (e.g., supply reliability, supply security, applications). The group would be responsible for dealing with proposed congressional legislation, regulatory concerns, and electric utility industry relations. The group would also be responsible for correlation and evaluation of data produced by the Department of Energy and the Electric Utility Industry (often in response to federal law). Currently, individual services have utility rate intervention teams that might be considered for such a role. However, the staffing of each team would have to be increased substantially to adequately deal with all relevant issues. An organization at the Office of the Secretary of Defense (OSD) level would be more appropriate for tasks as outlined above.

**3. Areas of Leadership and Responsibility Should Be Assigned to Each of the Services.**

Each military installation in an area would be supported by the service responsible for utility contracts in that area. Each service would also be responsible for developing an area of expertise relevant to the electrical utility field. Questions, conflicts, etc. would be referred to the service responsible for leadership in that area. Establishing areas and leadership roles will allow the Department of

Defense to exercise advanced procurement and training strategies while providing required field logistical support.

#### D. ANSWERS TO RESEARCH QUESTIONS

##### 1. Principle Research Question: What Do Current Federal Statutes, Regulations, and Policies Mandate for Competitive Procurement of Electrical Power?

There is not a clear federal policy on the interpretation of what existing statutes and regulations mean. Federal statutes direct competition for goods and services to the fullest extent possible. Congressional policy since at least 1809 (the Tenth Congress) has been to require today's equivalent of full and open competition for goods and services. US Supreme Court rulings uphold the right, and obligation, of federal procurement officers to compete the acquisition of goods and services, almost without interference of state regulations. However, House and Senate Appropriations Committees have placed direction in the Department of Defense Appropriations Act prohibiting the Department from issuing (in the FAR) clear, unambiguous language implementing competition guidelines (for electrical power) required by relevant federal statutes. While this act must be renewed each new fiscal year, it still has the force of law for that fiscal year. Irrespective of the Appropriations Act directions, the CICA requires competition for goods and services procurement. Until clear, *unambiguous* direction is received from Congress, procurement officers must compete electrical power needs within the parameters set down by Congress. To date, Congress has not prohibited competitive procurement of

electrical power, only certain types of competitions (utility vs. utility) when certain conditions exist.

**2. Secondary Research Question: What Are the Conditions Necessary For the Department of Defense to Competitively Procure Electric Power in the Most Timely and Efficient Manner?**

A clear and flexible performance-oriented design specification is important. The unambiguous authority to contract for competitive electrical power is also crucial. This can be shown to exist in a number of ways: the existence of more than one supplier willing to make an offer to supply the proposed contract electrical power requirements, the ability to supply the required electrical power from self-generation or cogeneration, or the ability to gain the most advantageous position for the government (achieved by strategy and tactics). But the cornerstone of any successful procurement process is an adequate procurement staff trained in the details of the procurement at hand. In this procurement situation, such a staff should include experts in the fields of electric utilities, regulatory agencies, and federal procurement contracting.

**E. AREAS OF FUTURE RESEARCH**

1. Amount of cross-class subsidy paid annually by the Department of Defense. This will establish what the cost of current policies and practices is. It will also highlight those installations with the greatest amounts of subsidy, both cash and percentage of bill.
2. Annual rate of return reported by electric utilities serving Department of Defense installations. This will allow the Department to concentrate on those rates and tariffs that clearly are too

- high. Installations in such utility service areas are paying not only cross-class subsidies but also unfair monopoly profits.
3. Difference between tariff rates charged Department of Defense installations and tariff rates charged wholesale customers of electric utilities serving those installations. This will allow the Department to gauge the fairness and reasonableness of current tariff rates. If inappropriate, the Department could concentrate on negotiations and/or competition to obtain relief.
  4. The practices currently being used by private companies to reduce energy costs. Special emphasis could be given to practices that are easily applicable to federal installations and restrictions.

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